

## CLAIMS

1                   1.       Extruder with at least one screw in at least one axially oriented bore (2, 3)  
2   in a barrel and with a cutting plate (4) of a granulating unit, characterized in that the cutting plate  
3   (4) is connected directly to the end of the barrel at the downstream end of the extruder, and in  
4   that heating elements are located in the barrel in the immediate vicinity of the contact surface  
5   between the barrel and the cutting plate (4).

1                   2.   Extruder according to Claim 1, characterized in that the barrel is built up in  
2   modular fashion out of axial barrel segments (1).

1                   3.   Extruder according to one of the preceding claims, characterized in that the  
2   heating elements are heating cartridges.

1                   4.   Extruder according to Claim 3, characterized in that the heating cartridges are  
2   installed in continuous bores (8) passing all the way through the barrel.

1                   5.   Extruder according to Claim 4, characterized in that the heating cartridges are  
2   arranged in the barrel in such a way as to form a square.

1                   6.   Extruder according to one of the preceding claims, characterized in that two  
2   screws are mounted in overlapping, axially oriented bores (2, 3), and in that, with respect to the  
3   transport direction of the screws, the bores (2, 3) are followed by a channel (5), the outlet-side  
4   cross section of which is congruent with the cross section of the feed opening of the attached  
5   cutting plate (4).

1                   7. Extruder according to Claim 2 and Claim 6, characterized in that the  
2 overlapping, axially oriented bores (2, 3) extend all the way to the inlet-side part of the last barrel  
3 segment (1); in that the screws in this last barrel segment (1) have a shape which causes the  
4 pressure to build up in the extrudate when they turn; and in that the channel (5) adjoining the  
5 bores (2, 3) is located in the outlet-side part of the last barrel segment (1).

1                   8. Extruder according to one of the preceding claims, characterized in that the  
2 barrel has a mounting recess (9), in which at least half of the volume of the cutting plate (4) is  
3 accommodated.

1                   9. Use of an extruder according to one of the preceding claims to granulate  
2 thermoplastic compositions as part of a compounding process.